Decision Notice

& Finding of No Significant Impact

Greasy Creek

USDA Forest Service
Ocoee/Hiwassee District, Cherokee National Forest
Polk County, Tennessee

Decision and Reasons for the Decision

Background

The Ocoee/Hiwassee District has prepared an Environmental Assessment (EA) that documents the analysis of a no-action alternative and one action alternative that will implement the Cherokee National Forest (CNF) 2004 Revised Land and Resource Management Plan (RLRMP). The action alternative evaluates utilizing commercial timber harvest to provide early successional wildlife habitat, restore community types, diversify the age class distribution, and improve forest health. Connected actions such as site preparation, release of desired regeneration species from competition, maintaining system roads, system road construction, temporary road construction, and wildlife and fisheries habitat improvement are also part of the analysis. This EA was prepared by an interdisciplinary team and is available for public review at the Tellico District Office, Tellico Plains, TN. This Decision Notice (DN) and Finding of No Significant Impact (FONSI) document the rational for selection of modified Alternative B.

The project area is located Polk County just to the north of Parksville Lake and east of Benton, Tennessee. The project is needed (EA, pgs. 3-7) to, provide early successional habitat, improve wildlife habitat, and improve forest health. The EA documents three alternatives, two of which were analyzed in detail, to meet this need.

Decision

Based upon the analysis and disclosure of effects contained in the EA, I have decided to select Alternative B with modifications for implementation. Following is a narrative description of modified Alternative B (See attached maps for more specific locations of activities).

Silvicultural Treatments

1) Restore natural oak and oak-pine communities and create early successional habitat through silvicultural treatments on approximately 83 acres of existing forested stands that have been altered from desired conditions due to previous land use. Restore these stands to forested communities that would naturally occur on these sites. These stands are mostly upland sites that would support “dry to mesic oak forest” or “dry and dry mesic oak-pine forests”. These stands currently support a high component of Virginia pine, white pine or both of these species. Regeneration sources would be existing seedlings, coppice or stump sprouts. Herbicide application (triclopyr) would be applied in these stands the second year after planting. Activities would occur in the stands listed in Table 1.

Table 1. Restoration of Oak and Oak-Pine Communities

Compartment/ Stand	Acreage	Type of Harvest	Reforestation	Scenic Integrity Objective/ Viewing Platform
303/05	40	Shelterwood w/reserves	Natural regeneration by seeding and sprouting. Manual site preparation with 2nd year chemical release.	Low/ Moderate Clear Creek NFSR 185
357/40	27	Shelterwood w/reserves	Natural regeneration by seeding and sprouting. Manual site preparation with burning, 2nd year chemical release.	Moderate Oswald Dome NFSR 77
357/41	16	Shelterwood w/reserves	Natural regeneration by seeding and sprouting. Manual site preparation with burning, 2nd year chemical release.	Low

2) Restore shortleaf pine and shortleaf pine-oak communities and create early successional habitat through silvicultural treatments on approximately 307 acres of existing forested stands that have been altered from desired conditions due to previous land use. These are mostly ridge sites that would support "xeric pine and pine-oak forests" within which fire has historically played an important role in shaping species composition. These stands currently support a high component of Virginia pine, white pine or both of these species. Site preparation, planting of shortleaf pine, and a second year chemical release using herbicide (triclopyr) would ensure the survival and establishment of desired oak and pine. Activities would occur in the following stands shown in Table 2.

Table 2. Restoration of Shortleaf Pine and Shortleaf Pine-Oak Communities

Compartment/ Stand	Acreage	Type of Harvest	Reforestation	Scenic Integrity Objective/ Viewing Platform
301/24	20	Seedtree w/reserves	Manual site preparation with burning, plant shortleaf pine, 2nd year chemical release	Low/ Moderate Oswald Dome NFSR 77
301/27	17	Seedtree w/reserves	Manual site preparation with burning, plant shortleaf pine, 2nd year chemical release	Low/ Moderate Oswald Dome NFSR 77
302/21	20	Clearcut w/reserves	Manual site preparation with burning, plant shortleaf pine, 2nd year chemical release	Low/ Moderate Oswald Dome NFSR 77 and Clear Creek NFSR 185
304/24	40	Seedtree w/reserves	Manual site preparation with burning, plant shortleaf pine, 2nd year chemical release	Low
304/25	28	Seedtree w/reserves	Manual site preparation with burning, plant shortleaf pine, 2nd year chemical release	Low

305/04	25	Seedtree w/reserves	Manual site preparation with burning, plant shortleaf pine, 2nd year chemical release	Low
306/03	17	Seedtree w/reserves	Manual site preparation with burning, plant shortleaf pine, 2nd year chemical release	Low
306/32	40	Seedtree w/reserves	Manual site preparation with burning, spot plant shortleaf pine, 2nd year chemical release	Low
306/35	18	Seedtree w/reserves	Manual site preparation with burning, plant shortleaf pine, 2nd year chemical release	Low
306/38	37	Seedtree w/reserves	Manual site preparation with burning, plant shortleaf pine, 2nd year chemical release	Low
375/08	35	Seedtree w/reserves	Manual site preparation with burning, plant shortleaf pine, 2nd year chemical release	Moderate Clear Creek Trail #79 (0.75 mile) Rim Rock Trail # 77 (0.57 mile)
375/22	10	Seedtree w/reserves	Manual site preparation with burning, plant shortleaf pine, 2nd year chemical release	Low

3) Restore native pine-oak communities that have been impacted by SPB mortality. This upland pine-oak stand would be prescribe burned for site preparation and allowed to regenerate naturally from seeding and sprouting on 39 acres shown in Table 3.

Table 3. Restoration by Site Preparation Burn

Compartment/Stand	Acres	Reforestation
357/16	39	Site preparation burn, natural regeneration

Design criteria were developed to ensure compatibility of Silvicultural Treatment activities with Scenery Integrity Objectives (SIO) and RLRMP standards FW-112 and FW-113. The intent of design criteria is to reduce elements visually recognized as detracting from scenic quality, and/or decreasing scenic integrity levels, while promoting elements known to enhance and/or maintain scenic integrity. Design criteria which minimize noticeable contrasts in the desired natural appearing landscape are the following:

- Utilize sensitive road and landing design. Where possible locate log landings, roads, and bladed skid trails out of view to avoid bare mineral soil observation from noted viewing platforms. If cut and fill slopes are created, re-vegetate to the extent possible.
- Shape and orient openings with contours and existing vegetation patterns to blend with existing landscape. Edges are shaped and feathered where appropriate and feasible. Avoid geometric shapes and appearance of straight lines.
- Root wads, slash, and other debris are chipped, lopped, or burned to an average of four feet of the ground when visible within 100' on either side of noted travel ways.
- Limit openings visible from noted travel routes

- Retain areas, as site condition allow, within the immediate foreground (300 feet from road) with a basal area up to 35 square feet to reduce visual impact of a large opening in the foreground.
- Retaining large diameter trees with well defined crowns along the road to frame new views created by a harvest unit does contribute to retaining SIO.
- Apply leave tree unit marking to limit visibility within 100' of noted travel routes.

Additional Wildlife Habitat Improvements

1) Chemical methods would be used to establish desired vegetation on approximately 10.5 miles of TVA transmission line. This is total mileage of line; the actual area treated with herbicide would generally be much less than the total acreage. About 8 miles of the line is outside of the original Greasy Creek Ecosystem Assessment Area.
The transmission line easement would be treated with an appropriate rate of herbicide to promote native grasses and forbs. Techniques that could be used include direct foliar applications using systems mounted on trucks, tractors or all-terrain vehicles, backpack sprayers, hand-held brushes or, basal bark and stem treatments using spraying or painting (wiping) methods, cut surface treatments (spraying or wiping), and woody stem injections. Herbicides to be considered are: Clopyralid, Dicamba, Glyphosate, Hexazinone, Imazapic, Imazapyr, Metsulfuron methyl, and Triclopyr. It is anticipated that most sites would require multiple treatments over several years to gain the desired level of control and establish native grasses and forbs. Monitoring would be a necessary component in determining the frequency and type of successive treatments.
Some areas may be planted following herbicide application. At that time, one of two seed mixtures would be used 1) a cool season mixture including rye grass and clover or 2) a native mixture including Indian grass, little bluestem, switchgrass, Illinois bundle flower, partridge pea, and big bluestem. Mixture selection would be based on site characteristics. Mechanical and chemical methods would also be used to maintain the preferred vegetation by selectively treating the woody sprouts that develop after planting.

2) Create ephemeral pools for amphibians and bats in temporary roads and log landings (approximately 10-30 pools up to .25 acre each).

3) Maintain approximately 43 acres of existing spot and linear wildlife openings. Maintenance activities typically include, but are not limited to, mowing, fertilizing, sowing, and rehabilitation.

Table 4. Linear wildlife openings for maintenance

NFSR	Opening number	Acres	Miles	NFSR	Opening number	Acres	Miles
33041	304-1	8	4.45	336A-D/33121	312-2	5	3.4
1305	305-1	2	1.43	33571A	357-1	2.8	1.55
33402	305-2	4	1.68	33571B	357-2	1.2	.77
1311	311-2	1.6	.58	33571C	357-3	.6	.27
5050	309.9	2.6	2.2				

Table 5. Spot wildlife openings for maintenance

Opening number	Acres	Opening number	Acres	Opening number	Acres
301-1	.6	309-2	1	309-7	.5
301-2	1	309-3	.8	309-8	.3
301-3	.8	309-4	1.4	311-1	.7
307-1	1.2	309-5	1.1	312-1	.9
309-1	2.3	309-6	1.3	357-4	1.5

4) Seed areas of timber harvest that are site prep burned with a non invasive grass seed mixture following burning.

Fuel Reduction

1) Prescribe burn the units shown in Table 6 during dormant season to achieve fuel reduction, wildlife habitat improvement and vegetation management objectives. The prescribed burning would utilize roads, streams, and trails for fire lines when practical. Sections of constructed line (handline and dozer line) would be used sparingly, and only when there are no existing features to contain the prescribed burns. The units would not be burned during the same year and each unit may be burned twice over 5 years.

Table 6. Fuels Reduction Burns

Name of Burn	Burn Unit ID Number	Acres
Seed Orchard	O-32	450
Presswood Mountain	O-30	1,275
Madden Branch	O-36	1,120
Coon Creek (Hooper Mountain)	O-34	1,405
TOTAL		**4,250**

Transportation System

1) Relocate and construct 1.7 miles of NFSR 185 for the purpose of moving the road out of riparian habitat and improving water quality in Clear Creek. The old road bed would be obliterated and returned to riparian habitat.

2) Reconstruct approximately 3.3 miles of existing NFSRs to bring them up to standards. Work would primarily consist of; widening curves, spot placing gravel, brushing, minor re-shaping, cleaning and constructing dips and other drainage structures to improve overall drainage, upgrading culverts, and replacing gates. See Transportation Analysis in project file for details by road.)

3) Construct approximately 2.1 miles of temporary roads to access harvest units. Temporary roads would be closed, stabilized and seeded with wildlife preferred species following completion of the project.

4) Perform maintenance on approximately 18.5 miles of NFSRs to prepare the roads for management activities. Maintenance activities include placing gravel and grading.

5) Construct approximately .7 mile of new NFSRs to access a unit to be treated by commercial timber sale. The road would be the minimum standard needed to remove timber and would be for administrative use only.

Mitigation Measures

The RLRMP contains Forest Wide, Management Prescription specific, and Management Area specific standards that mitigate adverse effects to all resources. These standards are part of all action alternatives.

Additional mitigation measures were also developed to reduce impacts from the alternatives. The following mitigation measures are in addition to those required by the RLRMP.
If burning takes place during bald eagle nesting season (October 1 through June 15 or when monitoring determines eagles are nesting) prescribed burning will be conducted with the following mitigation:

- There will be no aerial ignition within the secondary zone. While the remainder of the burn may be conducted by aircraft, the flight path will not be within the secondary zone.
- Prior to and during ignition, the wind direction will be away from the nest location.
- The wind direction will be monitored during ignition.
- The eagles will be monitored during ignition to record their behavior.
- If the wind direction shifts towards the nest, burning will be completed in as timely a manner as possible observing all human safety precautions.
- No activities that modify the canopy would occur during nesting season (October 1 to June 15) within secondary zone.

Reasons for the Decision

I believe Alternative B best addresses the Purpose and Need stated on pages 3-7 of the EA to move this area toward the desired conditions while addressing the range of significant issues for this project detailed on page 13 of the EA. Alternative B meets many of the goals and objectives of the RLRMP.

- Alternative B raises the level of 0-10 age class in 2009 from 3% of the forested acres within Management Prescription (MP) 9.H to approximately 8%. This creation of early successional habitat will benefit many wildlife species, both game and nongame (EA pgs. 30-33). The RLRMP objective for MP 9.H is to maintain 4 to 10% in the 0-10 age class. Alternative B will keep the project area within the RLRMP objective for early successional habitat.
- Forest health is improved by diversifying age classes and thinning to improve growth and vigor (EA pgs. 52-60). This addresses Goal 10, Objective 18.02, and Objective 8.C 1.01 of the RLRMP.

- It improves and restores native species composition by promoting the establishment and development of white oak and shortleaf pine and other native species. (EA pgs. 17-29, 52-60). This addresses Goal 10 and Objectives 17.02, 17.03, 17.05 and 18.02 of the RLRMP.
- Alternative B provides vegetative diversity to the area by both age and species mixes and create a more balanced age class distribution (EA pgs. 17-61). This addresses Goal 10 and Objective 8.C 1.01 of the RLRMP.
- Alternative B reduces and prevents unacceptable timber losses from insect and diseases by developing young healthy stands. (EA pgs. 52-60). This addresses Goal 18 and Objective 18.02 of the RLRMP.
- The number of upland water sources is increased, which provides an important habitat element for wildlife, including the endangered Indiana bat. This addresses Objective 14.02 of the RLRMP.
- Alternative B protects water quality through the use of State Best Management Practices and implementing the standards in the RLRMP (EA pgs. 70-84). This addresses Goals 2, 3, and 5 of the RLRMP.
- Alternative B utilizes herbicides to accomplish site preparation and second year release effectively and economically. Triclopyr is an EPA approved herbicide whose environmental effects will be minimal. Use of site specific, manually applied herbicides, in proper weather conditions does not pose unacceptable risk to surface or groundwater resources. Use of herbicides for release of seedling is a standard forestry practice that has proven both safe and effective, when properly applied (EA pgs. 76-79).

As required by 36 CFR 219, I have considered the best available science in making this decision. The project record demonstrates a thorough review of relevant scientific information, consideration of responsible opposing views, and where appropriate, the acknowledgement of incomplete or unavailable information, scientific uncertainty, and risk.

Other Alternatives Considered

In addition to the selected alternative the EA considered one other alternative. A comparison of the two alternatives considered in detail can be found in the EA on pages 15-16. The following is a summary of the other alternative considered in the EA (pg. 14).

Alternative A (No Action)

Under the No Action Alternative, no changes to the existing environment would occur beyond those attributed to natural processes and disturbances. No project activities would be implemented. Routine activities such as road maintenance and wildlife opening maintenance would continue to occur.

Public Involvement

A proposal to improve wildlife habitat and forest health was listed in the Schedule of Proposed Actions in: July and October 2007; January, April, July and October 2008; January, April, July and October 2009; and January and April 2010. The proposal was provided to approximately 46 public, adjacent landowners and other agencies to solicit issues and concerns related to the proposed action in August 2007.

Using the two comments from the public, other agencies, and tribes, the interdisciplinary team identified no issues regarding the effects of the proposed action. A 30-day comment period was also provided between May 28 and June 26, 2009. One additional comment was received and is addressed in Appendix D to the EA.

Finding of No Significant Impact

After considering the environmental effects described in the EA, I have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. I base my findings on the following:

1. My finding of no significant environmental effects is not biased by the beneficial effects of the action.

2. There will be no significant effects on public health and safety. At the typical Forest Service use levels the SERA Risk Assessments and worksheets for all chemicals used show Hazard Quotients well below the concern level for human health. (see EA pgs. 76-79)

3. There will be no significant effects on unique characteristics of the area. The project proposes to maintain and restore native plant and animal communities. (see EA pgs. 17-61)

4. The effects on the quality of the human environment are not likely to be highly controversial. Treatment methods are based on past experience, scientific literature and/or research, and have been implemented in the past with expected results. No experimental or untried methods are prescribed. Potential threat of herbicides is minimal based on the mitigation measures. (see EA pgs. 16-84)

5. We have considerable experience with the types of activities to be implemented. The effects analysis shows the effects are not uncertain, and do not involve unique or unknown risk. (see EA pgs. 16-84)

6. The action is not likely to establish a precedent for future actions with significant effects. (see EA pgs. 16-84)

7. The cumulative impacts are not significant. (see EA pgs. 24-84)

8. The action will have no significant adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, because potential earth disturbing activities avoid these areas (see EA pgs. 67-68). The action will also not cause loss or destruction of significant scientific, cultural, or historical resources (see EA pgs. 67-68).

9. The action will not adversely affect any endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species act of 1973 (see EA pgs. 41-42) and Appendix B, Biological Evaluation).

10. The action will not violate Federal, State, and local laws or requirements for the protection of the environment. Applicable laws and regulations were considered in the EA. The action is consistent with the Cherokee National Forest Revised Land and Resource Management Plan (see EA pgs. 3-7 and 15).

Findings Required by Other Laws and Regulations

This decision to improve wildlife habitat and forest health, and enhance the transportation system through the use of timber harvesting is consistent with the intent of the RLRMP long-term goals and objectives listed on pages 22-72 (RLRMP). The project was designed in conformance with RLRMP standards and incorporates appropriate RLRMP standards for MP 7.A, 7.B, 7.D, 9.H, and 11, (pgs. 114-122, 126-129, and 156-168) and Management Areas 3 and 4 (pgs. 181-187).

It is my finding that the actions of this decision comply with the requirements of the National Forest Management Act (NFMA) of 1976, 16 U.S.C 1604 (g)(3)(E), the National Historic Preservation Act, the Endangered Species Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality.

I find the prescribed actions of this project, which alter vegetation, comply with the requirements of 16 U.S.C 1604 (g)(3)(F), by following the Forest-wide goals, objectives and standards as well as the standards for MP 9.H.

Forest Service Manual FSM 7712.13 Road Management Decisions must be informed by Roads Analysis Process (RAP): "When proposed road management activities would result in changes in access, such as changes in current use, traffic patterns, and road standards, or where there may be adverse effects on soil and water resources, ecological processes, or biological communities."

A watershed level RAP was completed for this analysis and the recommended changes to the transportation system were incorporated in the analysis.

Implementation Date

If no appeal is received, implementation of this decision may occur on, but not before, five business days after the close of the appeal filing period. If an appeal is received, implementation may occur on but not before the 15th business day following the date of appeal disposition (36 CFR 215.9).

Administrative Review or Appeal Opportunities

This decision is subject to appeal pursuant to 36 CFR 215.11. Appeals must meet content requirements of 36 CFR 215.14. A written appeal, including attachments, must be postmarked or received within 45 days after the date this notice is published in the *Polk County News*, Benton, TN. The appeal shall be sent to Cherokee National Forest, ATTN: Appeals, 2800 N. Ocoee Street, Cleveland, TN 37312. Appeals may be faxed to (423) 339-8650. Hand delivered appeals must be received at 2800 N. Ocoee Street, Cleveland, TN within normal business hours

of 8:00 am to 4:30 pm. Appeals may also be mailed electronically in a common digital format to appeals-southern-cherokee@fs.fed.us.

All time periods are computed using calendar days, including Saturdays, Sundays, and Federal holidays. However, when the time period expires on a Saturday, Sunday, or Federal holiday, the time is extended to the end of the next Federal working day (11:59 pm). The day after publication of the legal notice of the decision in the newspaper of record (36 CFR 215.7) is the first day of the appeal–filing period. The publication date of the legal notice of the decision in the newspaper of record is the exclusive means for calculating the time to file an appeal. Appellants should not rely on date or time from information provided by any other source.

Contact

For further information on this decision, contact Monte Williams, District Ranger, Ocoee/Hiwassee Ranger District, 3171 Hwy 64, Benton, TN 37307 or at (423) 338-3300.

/s/ Monte Williams — June 11, 2010

MONTE WILLIAMS — Date
Ocoee/Hiwassee District Ranger